

# UNITED STATES PATENT OFFICE.

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## METHOD OF TREATING WATERPROOFED SURFACES.

SPECIFICATION forming part of Letters Patent No. 577,283, dated February 16, 1897.

Application filed May 14, 1896. Serial No. 591,497. (No specimens.)

*To all whom it may concern:*

Be it known that I, EDWARD MAY CAFFALL, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Methods of Treating Waterproofed Surfaces, of which the following is a specification.

My invention has relation to the treatment of waterproofed surfaces of brick, stone, or analogous porous material; and it consists in a new and useful method or process of removing the surplus or excess of fluid or melted paraffin or other waxy substances from the surfaces of materials which have been waterproofed or preserved by said paraffin or waxy compounds, particularly (though not necessarily) when they have been applied by heating.

Heretofore the removal of the surplus or excess of the waxy compound has been accomplished by using a solvent of such compounds, (after the treated surfaces have become cool,) such as benzin or other hydrocarbon, and then using fatty substances or soaps to dissolve and mix with it and removing by washing; but this has been found to be slow and unsatisfactory. The waxy compound being usually white is not readily seen in crevices or carvings of stone, &c., such as white marble and the like, and if any of the waxy substance is left upon the surface then in time this non-absorbed substance becomes sticky and is soon blackened by dirt, dust, &c., adhering thereto and is very difficult to remove. To obviate these objections, and to secure certain advantages in facility and perfection of operation as well as economy of time and labor, I proceed as follows:

When the surface to be treated has been sufficiently warmed so that it will absorb the waterproofing compound to the requisite depth, the said compound is applied thereon freely to insure the best results. When this is done, and while the stone or whatever is being treated is still hot, I sprinkle or rub upon the surface a dry powder, such as whitening, marble dust, magnesia carbonate, for marble and other white stone or material; and in cases of colored stone or other treated material, a dry powder of similar color and preferably (though not necessarily) of similar constituents is employed. Then I rewarm

the powdered surfaces until the powder has completely absorbed the surplus compound that may have been left upon the treated surfaces. The removal of this powder with the absorbed compound is quickly accomplished by brushing or washing with water, stone, or sand, or by other mechanical applications. The excess of powder on the surface, when cool readily moistens when water is thrown upon it, but when the waterproofed surface is washed with benzene, &c., as heretofore, water is made to take effect only with great labor and difficulty, and then but unsatisfactorily. The facility of the final washing or rubbing with stone, sand, and water after my method is apparent and marked and results in a great saving of time and labor. The treated surface is by my method completely cleared of the waxy compound, thereby preventing future discolorations by dust, &c., as heretofore mentioned; and the improved method obviates the use of solvents for the paraffin, &c., which solvents soften the waterproofing material and render it sticky and thus liable to catch foreign matters.

While I have described my method in connection with waterproofing by the application of heat, it is only because that is the preferable and most approved way of waterproofing. The method is applicable in connection with any of the cold processes, of course, but not with the same degree of satisfactory result, although to much advantage over the methods heretofore practiced. For instance, after a cold surface has been treated it may be washed down with a solvent and the solvent and surplus sticky material removed by the application of the powdered material and by washing with water, sand, &c., as above explained. The powdered material will greatly facilitate the washing and will produce a more perfect result than is possible without the powder.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. The herein-described method of treating waterproofed surfaces, the same consisting in applying a waxy, absorbable material, and upon this a powdered absorbing material, sufficient to take up the surplus waterproofing substance, and then removing the powder

by washing with water, substantially as explained.

2. The herein-described method of treating waterproofed surfaces, consisting in applying  
5 waxy, absorbable material in a heated state, employing a powdered, absorbing material to take up the surplus of the waterproofing material while still heated, heating the absorbing material thus applied, allowing it to cool,

and then removing the powder, substantially 10 in the manner explained.

Signed at New York, in the county and State of New York, this 23d day of April, A. D. 1896.

EDWARD MAY CAFFALL.

Witnesses:

W. J. MORGAN,  
WORTH OSGOOD.